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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,309	09/19/2003	Thomas E. Creamer	BOC9-2003-0023 (392)	7918
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AKERMAN SENTERFITT P. O. BOX 3188 WEST PALM BEACH, FL 33402-3188			EXAMINER PARK, JEONG S	
			ART UNIT 2154	PAPER NUMBER
			MAIL DATE 09/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/666,309	<b>Applicant(s)</b> CREAMER ET AL.	
	<b>Examiner</b> Jeong S. Park	<b>Art Unit</b> 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-14, 16-18 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-14, 16-18, 20-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is in response to communications filed July 16, 2007.

#### ***Claim Objections***

2. Claims 14 and 16 are objected to because of the following informalities:  
  
In claim 14, line 2, the word "executable" should be corrected as --executable--.  
  
Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Gruyer et al. (hereinafter Gruyer)(U.S. Patent Pub. No. 2002/0112048 A1).

Regarding claim 14, Gruyer teaches as follows:

A computer-readable storage medium having stored thereon, a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

Recording in a ghost log of a ghost agent associated with a host software object configured to record application-specific activities performed by said host software object (web application user) in different grids of a grid environment (the agent software monitors and records user's behavior information, see, e.g., page 3, paragraphs [0036] and [0044]);

Identifying said ghost agent to components within said grid environment using a ghost identifier (a version of the executable agent) of said ghost agent (see, e.g., page 9, paragraph [0089]); and

Managing interactions between said ghost agent and said grid environment using a ghost controller (user interface management module 612 in figure 6) of said ghost agent (user interface management module, 612 in figure 6, inside the agent 608 in figure 6, see, e.g., paragraphs [0056] and [0057]), wherein in response to said host software object moving from one grid to another grid in said grid environment said ghost controller moves said ghost agent from said one grid to said another grid within said grid environment (the agent software runs automatically to monitor and record the user actions as the user navigates the Internet via a web browser, see, e.g., page 3, paragraph [0041], lines 6-10).

Regarding claim 16, Gruyer teaches as follows:

Means for disassociating said ghost agent from said host software object (current web browser session); and

Means for linking said disassociated ghost agent to a different host software object (different web browser session)(the agent monitors a different web browser session after being ended with the current web browser session, see, e.g., page 8, paragraph [0083] and [0084]).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4-7, 9-13, 17, 18, 20-23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruyer et al. (hereinafter Gruyer)(U.S. Patent Pub. No. 2002/0112048 A1), and further in view of Williams (U.S. Patent Pub. No. 2002/0095596 A1).

Regarding claims 1, 17 and 26, Gruyer teaches as follows:

A method for evaluating system behavior of an application domain (web sites, reference character 114 in figure 1) within a grid environment (wherein the grid environment is interpreted as the World Wide Web because the web services on the Internet is the distributed shared computer environment) comprising the steps of (see, e.g., page 1, paragraph [0009]);

Identifying a host software object (web application user accessing the web site by a web browser) within a computing resource (web server) of said application domain (web site)(the accessing user is identified when the user visits a web site to be monitored, see, e.g., page 3, paragraph [0035], lines 1-8);

Associating (monitoring and recording) a ghost software object (agent software, reference character 106 in figure 1) within said one grid with said host software object (web application user), wherein said associated ghost software object replicates said host software actions within said one grid, and wherein said associated ghost software object records said replicated actions (the agent software monitors and records user's behavior information, see, e.g., page 3, paragraph [0036]);

Moving said host software object from said computing resource in said one grid (web site since a web site comprises of multiple web servers) within said grid environment to another computing resource, said another resource within another grid within said grid environment (a user to directly access a selected entry point into specific area of a selected web site, see, e.g., page 4, paragraph [0049] and figure 3); and

Responsively moving said associated ghost software object from said one grid to said another grid (the agent software runs automatically to monitor and record the user actions as the user navigates the Internet via a web browser, see, e.g., page 3, paragraph [0041], lines 6-10).

Even though Gruyer teaches all the claim limitations as explained above, Williams further explicitly teaches as follows:

Williams teaches as follows:

A backend server is a typical computing resource; and

The backend server comprises a computer system providing a processing resource platform similar to that used for the web server (see, e.g., page 5, paragraph [0064]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Gruyer to present a web server as a computing resource in the distributed computer system as taught by Williams in order to monitor efficiently user's activities on the web site including all linked web servers or computing resources.

Regarding claims 2 and 18, Gruyer teaches that a step of determining usage

statistics (web usage) for said application domain (the selected web site) based at least in part upon said recorded actions (the monitored information stored in a database, reference character 120 in figure 1, shows the web usage, see, e.g., page 4, paragraph [0046]).

Regarding claims 4 and 20, Gruyer teaches that a step of optimizing performance of said application domain based upon said usage statistics (analyzer software analyses the content of the stored monitored information and produces various reports in order to bench mark and better service their users, see, e.g., page 4, paragraph [0044], lines 8-14).

Regarding claims 5 and 21, Gruyer teaches as follows:

Said replicated actions are passive actions comprising the step of preventing said replicated actions from operationally executing in said grid environment (monitoring agent software is downloaded and installed on the user device, see, e.g., page 3, paragraph [0035], lines 8-13, also has a minimal impact on the user device, see, e.g., page 3, paragraph [0042], lines 9-12).

Regarding claims 6 and 22, Gruyer teaches as follows:

Determining a location for logging data that is external (over a network) to said associated software object (agent software package includes the URL of a server, 1102 in figure 11, as a logging data location, see, e.g., page 8, paragraph [0087], lines 1-6 and figure 11); and

Conveying said recorded replicated actions to said determined location. (the agent software, 106 in figure 1, sends the monitored information over a network to a

server, 118 in figure 1, and stored in a database, 120 in figure 1, see, e.g., page 4, paragraph [0044]).

Regarding claims 7 and 23, Gruyer teaches as follows:

Disassociating step of said associated software object (agent) from said host software object (current web browser session); and

Associating step of said software object (agent) with a different host software object (different web browser session) within said application domain (the agent monitors a different web browser session after being ended with the current web browser session, see, e.g., page 8, paragraph [0083] and [0084]).

Regarding claims 9 and 25, Gruyer teaches as follows:

The steps of selecting a plurality of host software objects within said application domain (the user panel, 104 in figure 1, refers a list of users who have consented to being monitored to a same selected set of web sites, see, e.g., page 3, paragraph [0040]); and

For each selected host software object, repeating said associating step (monitoring agent software is downloaded and installed on the user device, see, e.g., page 3, paragraph [0035], lines 8-13), said replicating recording steps (the agent software monitors and records user's behavior information, see, e.g., page 3, paragraph [0036]).

Regarding claim 10, Gruyer teaches as follows:

A system for logging application domain information within a grid environment comprising (wherein the grid environment is interpreted as the World Wide Web



because the web services on the Internet is the distributed shared computer environment, see, e.g., page 1, paragraph [0009]):

An application domain, wherein said application domain comprises a plurality of computing resources (web servers) from a plurality of different grids in said grid environment (web site is a collection of web files reside from a number of web servers located in many different geographic places, see, e.g., page 2, paragraph [0030]) for executing actions of at least one host software object, wherein different ones of said executed actions are executed within different grids of said grid environment (the web application user navigates the Internet, application domain, via the web browser, see, e.g., page 3, paragraph [0041]); and

Wherein said application domain associates at least one ghost agent with said at least one host software object, wherein said at least one ghost agent is configured to replicate and record said executed actions of said associated host software object (the agent software monitors and records user's behavior information, see, e.g., page 3, paragraph [0036]), and wherein in response to moving said associated host software object from one computing resource in one grid of said grid environment to another computing resource in a another grid of said grid environment said associated ghost agent is also moved from said one computing resource to said another computing resource (the agent software runs automatically to monitor and record the user actions as the user navigates the Internet via a web browser, see, e.g., page 3, paragraph [0041], lines 6-10).

Even though Gruyer teaches all the claim limitations as explained above,

Williams further explicitly teaches as follows:

A backend server is a typical computing resource; and

The backend server comprises a computer system providing a processing resource platform similar to that used for the web server (see, e.g., page 5, paragraph [0064]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Gruyer to present a web server as a computing resource in the distributed computer system as taught by Williams in order to monitor efficiently user's activities on the web site including all linked web servers or computing resources.

Regarding claim 11, Gruyer teaches as follows:

At least one host software object (web browser operated by the panel users comprises a plurality of host software objects (it supports one or more panel users which are referred to users being monitored, see, e.g., page 5, paragraph [0055]); and

At least one ghost agent comprises a plurality of said ghost agents (one or more agents running on user devices, see, e.g., page 9, paragraph [0088], lines 25-34).

Regarding claim 12, Gruyer teaches that an application domain data store (database, 120 in figure 1) configured to receive messages from said ghost agents (the server, 118 in figure 1, collects the user behavioral information from the agents and stores in a database, see, e.g., page 4, paragraph [0044], lines 5-8).

Regarding claim 13, Gruyer teaches that an application analyzer (analyzer software) configured to analyze application-specific data gathered by said ghost agents (analyzer software that data mines and analyses the content of the database and

produces various reports, see, e.g., page 4, paragraph [0044], lines 8-10).

7. Claims 8 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruyer et al. (hereinafter Gruyer)(U.S. Patent Pub. No. 2002/0112048 A1).

Regarding claims 8 and 24, Gruyer discloses all the limitations of claim as explained above regarding claim 7 except for the cloning the associated software and associating the cloned associated software with a different host software object.

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to transfer a clone of the same agent software object to monitor multiple host software objects, since it resolves the same problem of monitoring different host software object. Also the cloning is interpreted a copy of the associated software object from a hard disk to a memory to execute the required process.

### ***Response to Arguments***

8. Applicant's arguments filed 7/16/2007, with respect to claims 1-41 have been considered but are moot in view of the new ground(s) of rejection.

#### **A. Summary of Applicant's Arguments**

In the remarks, the applicant argues as followings:

1) Gruyer fails to disclose a host software object that moves from grid to grid to execute operations in an application domain. In the Office Action, it is asserted that a web browser is equivalent to such a software object. Applicants respectfully submit that such a characterization is incorrect.

2) Gruyer fails to disclose the use of a ghost agent that can move from grid to grid within a grid computing environment to record the actions of a host software object

moving from grid to grid. Gruyer only discloses an agent downloaded to a user device to monitor web usage on the user device. Nowhere does Gruyer expressly or inherently teach that the agent even travels with the web request to the one or more servers.

B. Response to Arguments:

In response to applicant's argument 1) that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., host software object) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The host software object was defined in the specification, page 8, paragraph [0021] as an application user among with other examples. When a web application user accesses the web site with the web browser the web site identifies the web application user. The web application user (host software object) may execute any function available at the web site.

In response to applicant's argument 2), the grid environment is interpreted as the World Wide Web because the web services on the Internet is the distributed shared computer environment (see, e.g., page 1, paragraph [0009]). Web site is a collection of web files reside from a number of web servers (computing resources) located in many different geographic places (see, e.g., page 2, paragraph [0030]). The web application user (applicant's host software object) with the agent (applicant's ghost agent) navigates the Internet, application domain, via the web browser (see, e.g., page 3, paragraph [0041]). Therefore the web application user along with the agent is moving

from a web site (grid) to the other web site (grid).

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeong S. Park whose telephone number is 571-270-1597. The examiner can normally be reached on Monday through Thursday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**NATHAN FLYNN**  
**SUPERVISORY PATENT EXAMINER**

JP

September 7, 2007